

Woonasquatucket Bridge  
(Union Station Railroad Bridge)  
Spanning the Woonasquatucket River  
Providence  
Providence County  
Rhode Island

HAER No. RI-28

HAER  
RI,  
4-PROV,  
139-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

Woonasquatucket Bridge  
(Union Station Railroad Bridge)

HAER No. RI-28

Location: Spanning the Woonasquatucket River, Providence, Rhode Island

Date of Construction 1892-93

Significance: The bridge, unique in Rhode Island, is historically significant because of its large number of parallel trusses.

The Woonasquatucket River Bridge was designed to carry twelve tracks at an angle over the Woonasquatucket River as the tracks curve northward to Smith Street. It consists of twenty-seven parallel trusses, each a modified Warren with verticals. The connections are pinned and the main supporting members consist of I-bars and riveted lattice girders. The lower chord of each truss contains five pairs of I-bars pinned together. Most of the trusses were built square across the river, though the end truss on the south side is skewed to follow the line of the bridge. The deck consists of a solid flooring of six-inch hard pine. The bridge covers an area of 47,000 square feet and weighs 1,500 tons (Francis 1909). HAER documentation of this bridge was conducted in 1977 by the Federal Railroad Administration. Since that time, half of the bridge has been replaced.

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